FERREIRA et al. Appl. No. 09/600,594 January 2, 2004

IN THE CLAIMS

Amend the claims as follows.

Claims 1-21 (cancelled).

Claim 22. (Currently Amended) Method of monitoring patient compliance and bioavailability of drugs contained in a body fluid <u>consisting essentially of comprising</u> the following steps:

(a) mixing and shaking mechanically the body fluid with a 0.1 M to 5.0 M aqueous zinc sulfate solution to precipitate proteins, and an appropriate solvent to extract the drug during deproteinizing, to precipitate proteins and strip off bound drug, in a single step, and recovering at least 97% of the drug ;

(b) centrifuging the mixture of (a), to obtain the separation of phases;

(c) recovering the supernatant of (b) and measuring, by methods other than immunoassays, the drug concentration in body fluid <u>using a colorimetric assay or a</u> <u>High-Performance Liquid Chromatography method, and</u>

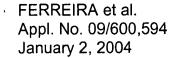
(d) obtaining drug levels down to at least 0.3μ g/ml.

Claim 23. (Previously Presented) Method according to claim 22 wherein the concentration of the aqueous zinc sulfate solution ranges from 0.2 M to 1.0 M.

Claim 24. (Previously Presented) Method according to claim 22 or 23 wherein the appropriate solvent is a polar solvent or a non polar solvent or mixtures thereof.

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Claim 25. (Currently Amended) Method according to claim 24 wherein the nonpolar solvent is an organic solvent selected from the group consisting of acetonitrile/2-propanol, benzene, toluene, dichloromethane, chloroform and mixtures thereof.

Claim 26. (Currently Amended) Method according to claim 24 wherein the polar solvent is selected from the group consisting of water, an alcohol and a mixture thereof.

Claim 27. (Currently Amended) Method according to claim 22 wherein, <u>optionally</u>, an antioxidizing agent is included in step (a).

Claim 28 (Canceled).

Claim 29. (Previously Presented) Method according to claim 22 or 23 or 27 wherein the drug is rifampicin.

Claim 30. (Previously Presented) Method according to claim 25 wherein the drug is rifampicin.

Claim 31. (Previously Presented) Method according to claim 22 wherein the drug is selected from the group consisting of an antimonial, an itraconazole, a proteinase and a reverse transcriptase inhibitor.

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Claim 32. (Currently Amended) Method of monitoring patient compliance and bioavailability of rifampicin contained in a small amount of a body fluid comprising the following steps:

(a) mixing and shaking mechanically the body fluid with a 0.1 M to 5.0 M aqueous zinc sulfate solution, an organic solvent selected from the group consisting of acetonitrile/2-propanol, benzene, toluene, dichloromethane, chloroform and a mixture thereof, to extract the drug rifampicin and, optionally, an antioxidizing agent to precipitate proteins and strip off bound drug at same time or in a single step;

(b) centrifuging the mixture of (a) to obtain the separation of phases;

(c) recovering the organic phase supernatant of (b) and measuring the drug concentration in said supernatant by using a colorimetric assay or a High-Performance Liquid Chromatography method down to at least 0.3μ g/ml.

Claim 33. (Previously Presented) Method according to claim 32 wherein the concentration of the aqueous zinc sulfate solution ranges from 0.2 M to 1.0 M.

Claim 34. (Previously Presented) Method according to claim 32 or 33 wherein the solvent used in step (a) is acetonitrile/2-propanol.

Claim 35. (Previously Presented) Method according to claim 32 wherein said antioxidizing agent is ascorbic acid.

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Claim 36. (Previously Presented) Method according to claim 32 wherein the rifampicin concentration is determined through spectrophotometric measurement at 340 nm.

Claim 37. (Allowed) Kit for measuring rifampicin concentration in a body fluid containing the following components:

(a) a standard solution of 0.1 M to 5.0 M of aqueous zinc sulfate, optionally, including an antioxidizing agent;

(b) an organic solvent selected from the group consisting of acetonitrile/2propanol, benzene, toluene, dichloromethane, chloroform and a mixture thereof;

(c) a serum standard containing a know amount of rifampicin to prepare a standard curve for user conditions.

Claim 38. (Allowed) Kit according to claim 37 wherein the concentration of the aqueous zinc sulfate solution ranges from 0.2 M to 1.0 M.

Claim 39. (Allowed) Kit according to claim 37 wherein said antioxiding agent is ascorbic acid.

Claim 40. (Allowed) Kit according to claim 37 wherein the organic solvent is acetonitrile/2-propanol.